The Bulletins are published weekly throughout the school year (thirty issues) to aid teachers and students in keeping abreast of geography behind current news events.

GEOGRAPHIC SCHOOL BULLETINS

of

The National Geographic Society

WASHINGTON 6, D. C.

The National Geographic Society is a non-profit educational and scientific Society established for the increase of geographic knowledge and its popular diffusion.

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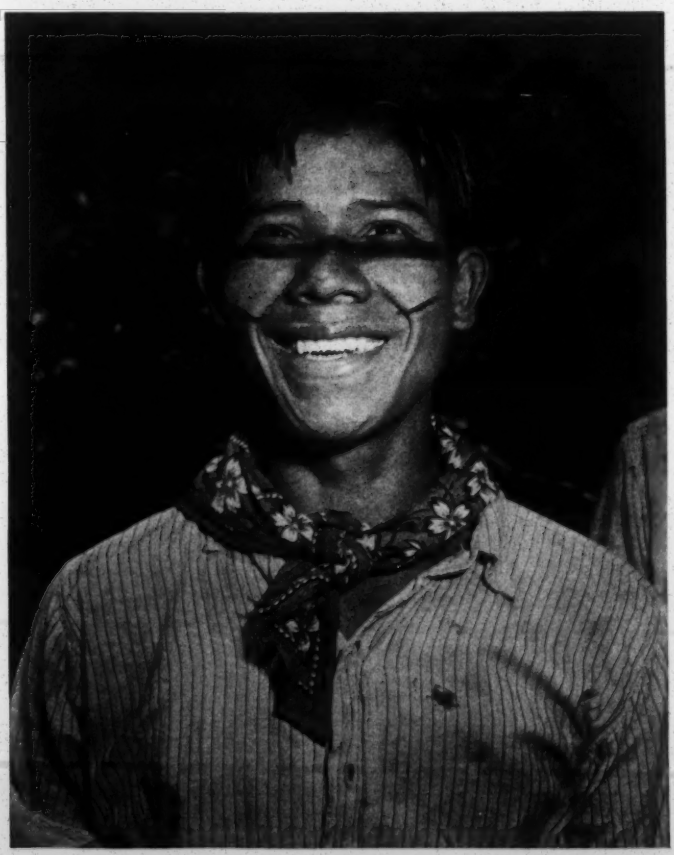

RICHARD H. STEWART

TEETH FILED AND FACE PAINTED, A GUAYMI IS READY FOR PANAMA'S BALSERÍA (Bulletin No. 5)

Bulletin No. 1, April 24, 1950.

Siam Is Set for Returned King's Coronation

SPECTACULAR events are coming thick and fast in Siam (Thailand). The gentle, royalty-loving Siamese are being treated to the best show in decades. Bangkok, capital of the southeast Asian Land of the White Elephant (illustration, next page), is throbbing with excitement.

Four years ago, 20-year-old King Ananda Mahidol mysteriously died. Next in line to the throne and to the title "Lord of Life and Possessor of the Twenty-four Golden Umbrellas" was his brother, Phumiphon Aduldet, two years younger. Phumiphon soon left for school in Switzerland.

Nine-wheeled Funeral Chariot

Recently he returned amid the pomp and circumstance of the East. Half a million countrymen lined the scorching streets and canals of Bangkok to get a glimpse of the king. Newspapers were printed in various-colored inks. Airplanes dropped flowers and puffed rice.

Next day came the cremation of Ananda, dead four years. Two hundred picked men pulled the great nine-wheeled funeral chariot. Before it marched yellow-robed Buddhist priests from some of the country's 18,000 temples. With them walked government officials dressed in dazzling costumes of ancient Siam. Behind, the slender king trudged in the heat. Then came the Prince Patriarch, high Buddhist dignitary.

This week, the third act will take place when King Phumiphon marries Princess Sirikit. The grand finale is scheduled for May 5. Then the king will be crowned and invested with his many symbols of authority, including the Great White Umbrella of State, the Golden Tablet of Style and Title, the Whisk of a Yak's Tail, the Girdle of the Nine Gems, and the Royal Betelnut Set.

The land Phumiphon will reign over is smaller than Texas, larger than California, and more populous than both of those states together. Nearly all its estimated 18,000,000 inhabitants live in the basin of the Chao Phraya —an area about the size of Missouri. In this river valley most of Siam's number-one crop—rice—is grown.

No Caste System

The last census reported that 83 per cent of Siamese workers were farmers or fishermen. The paddy farmers raise enough to make Siam the world's largest rice exporter. Rubber and tin production is increasing. Other crops include sugar, coconuts, tobacco, pepper, and cotton. Among livestock, elephants rank high. They move giant teakwood logs through the dense forests of north Siam.

The Siamese are a simple, happy people. They do not have castes. They gather freely to watch, or take part in, distinctive Siamese activities. In kite-flying contests, "male" kites knock the "female" ones out of the sky. Prize-fighters use feet, knees, and elbows to floor opponents. Amid frantic wagering, fighting fish tear at each other in jars.

ENTERED AS SECOND CLASS MATTER APRIL 27, 1949, POST OFFICE, WASHINGTON, D. C., UNDER ACT OF MARCH 3, 1879.
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UMI

GEORGE SHIRAS 3D

THIS SERENE POSE WAS FOLLOWED BY A HIGH LEAP AND PIERCING CRY

The surprised Canada lynx fled the instant after the late George Shiras 3d, father of wildlife photography, made this flashlight exposure on Loon Lake, Ontario. The lynx inhabits much of Canada, Alaska, and parts of the northern United States. Trapping and destruction of deep forests have virtually eliminated the lynx from the eastern states (Bulletin No. 4). The big paws enable him to walk snowshoelike on thin-crusted snow while stalking winter prey.

Bulletin No. 2, April 24, 1950.

Oslo, Norway Capital, Marks 900th Birthday

OSLO, capital city of Norway, is like a modern grandmother—young, pioneering, and beautiful in spite of her age.

Wearing her centuries lightly but proudly, Oslo will turn back the pages of history this spring when she celebrates her 900th birthday. The festivities are scheduled to start on May 14.

Many Events Planned

The birthday commemoration will reach its climax on May 17, Norway's Constitution Day, a national holiday. But it will continue throughout the summer. Special exhibits have been planned to depict the city's history and activities. There will be concerts presenting the music of such famous Norwegian composers as Edvard Grieg. The National Theater (illustration, next page) will honor the nation's dramatists.

Mayors of the world's principal cities have been invited to attend. The new city hall, under construction for nearly 15 years, will be opened to the public for the first time. Mrs. Roosevelt plans to unveil a statue of the late President Roosevelt. And the last group of Gustav Vigeland's statues, more than 50 years in the making, will be in place at Frogner Park.

Oslo is Norway's largest city and most important seaport. Its population exceeds 450,000. It has one of the most extensive municipal areas in the world, with some 170 square miles of city streets, parks, and impressive modern buildings surrounded by wooded mountains which cut off chill winds and temper the climate.

The city stands at the head of Oslo Fjord, on the Aker River. About 80 miles south flows the Skagerrak, pathway to the North Sea. Oslo's deep-water harbor can accommodate the largest ships afloat.

Ships of Vikings and Modern Explorers on Display

The city was founded by Harald the Hard who reigned from 1047 to 1066. Through the centuries, however, one after another the wooden cities built on the site were destroyed by fire, so that visitors today see little evidence of the great age Oslo celebrates this year.

The sole building to remain from the early days is Akershus castle, built in 1300. Other relics of the distant past are three Viking ships in a building of their own at the Folk Museum at Bygdoy, the islandlike peninsula west of the city. These ancient ships were discovered in burial mounds near Oslo. Also on display at Bygdoy is the polar ship *Fram*. Built for Fridtjof Nansen, the noted Norwegian Arctic explorer, in the 1890's, it also carried his fellow countryman, Raold Amundsen, when he discovered the South Pole in 1911.

More than 150 old buildings have been brought from all over Norway and reassembled at the Museum. In them house furnishings and examples of native arts and crafts, some of them very old, reveal a picture of life in the Viking age, more than 1,000 years ago. Groups of farm buildings show country life in different sections of the nation, and city customs are demonstrated in a panorama of architectural styles and furnishings dating from the early Middle Ages.

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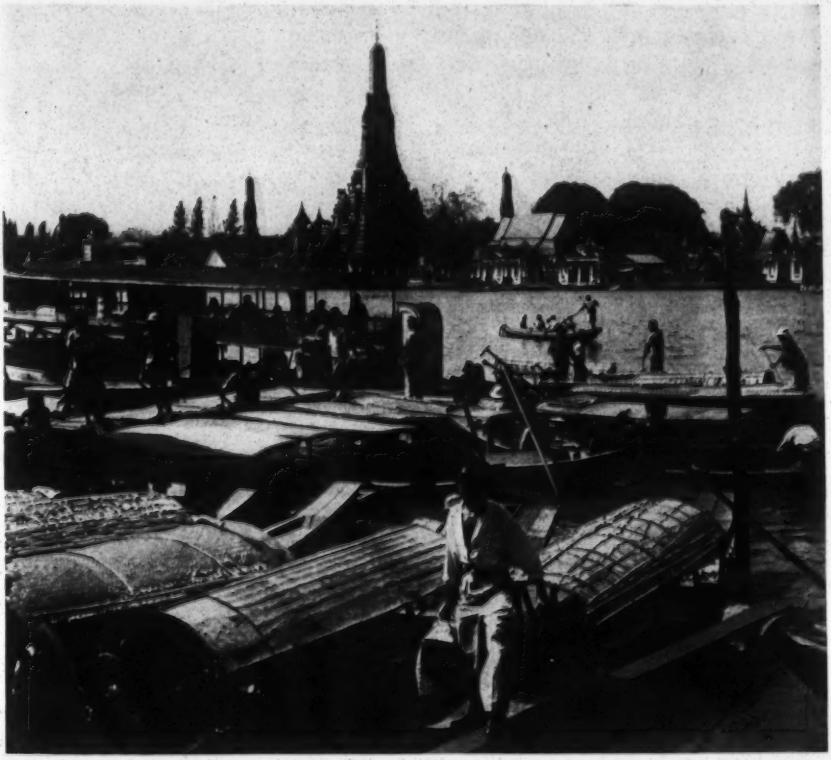
Siam's traditional dances, depicting religious or mythological events, are known over the world. Slim barefoot girls with supple wrists, seemingly boneless hands, and temple-shaped headdresses perform slow, intricate steps in heavy jeweled costumes. A modernized dance known as the *ramwong* is a current craze. The back-curved fingers of the ancient dances are kept, but the tempo is livelier.

The ruler who has become well known to Americans through the book and movie, *Anna and the King of Siam,* was the great-grandfather of Phumiphon. The dynasty to which they both belong goes back to King Rama I who made himself master of an enlarged and unified Siam in 1782. Since then the country has maintained its independence except for a brief period of Japanese occupation during World War II.

NOTE: Siam is shown on the National Geographic Society's map of Southeast Asia. Write the Society's headquarters, Washington 6, D. C., for map price list.

For further information, see "Operation Eclipse: 1948," in the *National Geographic Magazine* for March, 1949; "Pageantry of the Siamese Stage" and "Scintillating Siam," February, 1947; "Ancient Temples and Modern Guns in Thailand" (ten photographs), November, 1941*; and "Land of the Free in Asia," May, 1934. (*Issues marked with an asterisk are included on a special list of Magazines available to teachers in packets of ten for $1.00; issues unmarked are available at 50¢ a copy.*)

See also, in the GEOGRAPHIC SCHOOL BULLETINS, January 10, 1949, "Siam May Trade Rice for Railroads"; and "To Outsiders, Thailand Is Once More Siam," November 5, 1945.



W. ROBERT MOORE

SAMPANS AND TEMPLES MEET THE EYE IN EVERY BANGKOK VISTA

Bulletin No. 3, April 24, 1950.

Dual Personality Planned for Niagara Falls

ONE of the scenic wonders of the world is developing a split personality. Niagara Falls—twin cataracts separating the United States and Canada—are expected to put on their usual spectacular show during daylight hours for some 3,000,000 visitors this season, but after dark much of their tumbling waters will be diverted to produce electric power.

The double-shift schedule is posted in a new United States-Canadian treaty. This agreement is designed to please both honeymooners and industrialists alike. It provides for a heavy increase of power and at the same time safeguards the beauty of the famous falls.

Champlain First Put Falls on Map

Although not on the list of the world's ten highest falls, Niagara ranks first for steadiness of flow. In height, it ranges from 158 to 175 feet. Its volume places it after Guayra (in the Paraná River between Paraguay and Brazil) and the Khon in French Indochina.

First map to mark the falls was that which Champlain drew in 1613 of the Niagara frontier. He called it a "waterfall so very high that many kinds of fish are stunned in its descent." Forerunner of millions of snapshots taken by modern sightseers was a sketch of Niagara Falls by Father Hennepin, a Franciscan missionary with La Salle's expedition, who saw the falls in 1678.

Of the more than 200,000 cubic feet per second ("cusecs") of water estimated to pass over the falls, henceforth 100,000 cusecs will be reserved for daytime flow during spring and summer. At night and in the off season for tourists, all but 50,000 cusecs will be diverted above the falls for hydroelectric use.

Ancestor of the great industrial plants that Niagara now powers was a sawmill set up in 1725 opposite Goat Island to saw lumber for Fort Niagara, downstream at Lake Ontario. Its immediate successor was a gristmill built by the first American owner of the area, Augustus Porter.

State Park Opened in 1885

Porter bought the land adjoining the falls in 1805 or 1806 from an Englishman who had received the property by grant from the Indians. He became "master of the portage," controlling the seven-mile land route for goods around the falls. After the Erie Canal did away with the portage business two decades later, he encouraged power development. The first generator turned in 1881.

Four years later the state bought the property for a park reservation. When it was opened to the public on July 15, 1885, crowds swarmed over the islands and riverbanks. Many who had spent their lives within a few miles of the falls saw them for the first time. Up to that time every possible view was privately controlled and admissions were charged.

The reservation of 412 acres includes Prospect Park; Goat, Luna, and several smaller islands; and the Whirlpool and Devil's Hole parks downriver. The United States-Canada boundary gives the United States all

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The present city was built in 1624 when the Oslo of that day was completely burned. It was named after the reigning king, Christian IV, who ruled the then combined kingdoms of Norway and Denmark. It was known as Christiania for 300 years, reverting to its original name in 1924.

Oslo has a genuine claim to beauty in its wide, well-planned streets, its scrupulous cleanliness, and its freedom from slum areas. Wise city management has made it an energetic pioneer in providing for the welfare of its citizens. As early as 1896 the famous "Oslo Breakfast," planned by nutrition specialists, was inaugurated to provide free meals for all school children. Public housing for workers and a broad program of social services were established.

Although still suffering from the effects of the war, Oslo today is busy with plans for expansion. Two new hotels are under construction in anticipation of the world Olympic Winter Games, to be held in Norway in 1952. Other projects include new municipal beaches for Oslo's sports-loving citizens, and an even larger harbor.

NOTE: Oslo may be located on the Society's map of Europe and the Near East.

For additional information about Oslo and other areas of Norway, see "Norway Cracks Her Mountain Shell," in the *National Geographic Magazine* for August, 1948; "Spitzbergen Mines Coal Again," July, 1948; "Fishing in the Lofotens," March, 1947; "The White War in Norway," November, 1945*; "Norway, an Active Ally," March, 1943*; "Country Life in Norway," April, 1939; and "Norway, A Land of Stern Reality," July, 1930; see also, in the GEOGRAPHIC SCHOOL BULLETINS, May 9, 1949, "New Steel Age Looms for North Norway."

THROUGH THE PILLARED PORTICO OF THE NATIONAL THEATER PASS OSLO'S DRAMA ENTHUSIASTS

For sixty years this impressive structure has stood on the city's main street, Karl Johans Gade, facing the Eidsvolds-Plads, a small park whose gardens invite Oslo residents to stroll on pleasant summer evenings. Performances of plays by such noted Norwegian dramatists as Björnstjerne Björnson and Henrik Ibsen are part of the program planned for the city's 900th birthday celebration.

The famous Horseshoe Falls (foreground) is changing its curves. In the past 50 years it has worked its way 300 feet upriver. The once-straight line of the American Falls has acquired a curve.

Bulletin No. 4, April 24, 1950.

Large Creatures Head List of Dying Wildlife

EXTINCTION is stalking new prey in the wildlife world. The fate of the dinosaur, the moa, the great auk, the dodo, and many other giants among bygone beasts and birds is a familiar chapter. Today's list of creatures threatened with extermination is long, and studded with the names of the largest among living species.

Among North American big game, for example, only deer can be called abundant. Black bear, elk (illustration, next page), and antelope survive in relatively large numbers. Moose and caribou have become scarce. Grizzly bears are a rarity. Woodland caribou in the United States can be counted on one's fingers and toes. The big cats (illustration, inside cover) always a prey to hunters, are found only in the wildest areas.

Alaskan Game Imperiled

The North American bison, or buffalo, of course, is an example of man's successfully reversing the extinction process he started. Bison now number about 4,000 on fenced rangeland of a few northwestern states. Estimated at 50,000,000 in the 1850's, bison were prodigally slaughtered until their number dwindled to fewer than 600 by 1889.

The brown bears and moose of Alaska are the largest of their kind on earth. Americans sharing in postwar Alaskan development are reported imperiling the existence of these and other denizens of the territory in uncurbed raids on game.

Due to timely conservation, however, some 8,000 sea otters—king-size members of the otter family—today roam Alaskan coasts. Russian and American fur traders all but wiped out the animal a century ago. Its slow comeback in numbers dates from 1910, when protection measures were first enforced.

Largest of North American wildfowl is the trumpeter swan. On wings spanning eight feet it takes off into the wind with great effort like a loaded seaplane. Once plentiful in a wide range, it was thought to have been extinguished by hunters 50 years ago. It has slowly been restored to a present count of 1,500 on the lakes of Montana, Wyoming, and adjacent Canada.

Whooping Cranes Numbered 22 in 1942

Comparably big and beautiful is the whooping crane, now engaged in a touch-and-go fight for survival. Just 36—all that remain of a species whose flight darkened midwest skies in the early 1800's—spent the winter now ended in Aransas National Wildlife Refuge on the Texas gulf coast. Each April they take off for hidden nesting grounds in Canada. How many will return to Texas in October? Low ebb for the whooper was 22 in 1942.

Gone from the British Isles since World War II is the great bustard, Europe's largest land bird. Going or gone from haunts in Florida and the vicinity is the ivory-billed woodpecker, largest of its clan. Deserting the Bahamas in alarming fashion is the tall, scarlet-hued flamingo, whose one United States haven is at Hialeah Park, Miami, Florida.

islands near the falls except Cedar and the Dufferin Islands, a group of islets clustered in an inland loop of the river above the Horseshoe Falls. Their calm sidetracked waters serve as a safe and charming swimming and picnic area at the upriver end of Queen Victoria Park.

The flower gardens of this Canadian park are a riot of color, like reflections of the rainbows which curve through the mist tossed up by the falls. Hotels, restaurants, and shops displaying china, woolens, and other famous British wares rim the river drive.

Niagara has known side lines before, but in a bystander's role. By 1800 promoters were finding the crowds that were being attracted to the spot a ready-made audience for other shows. Tightrope walkers—most famous of whom was the Frenchman Gravelet, widely known as "Blondin" —took death-defying trips across the falls. In 1901 Anna Taylor went over Horseshoe Falls in a barrel. Others followed her lead, but so many lost their lives that police on both sides now discourage the practice.

Today Niagara Falls are at their peak as a well-controlled natural beauty spot. Two cities, namesakes of the cataracts, share the honor of acting as hosts to millions of annual visitors. The new treaty not only provides for an adequate flow of water over the falls, but plans measures to prevent erosion so that generations hence Niagara Falls will still be one of the most popular scenic wonders of the world.

NOTE: Niagara Falls appears on the Society's map of the Northeastern United States.

A HALF CENTURY OF EROSION HAS CHANGED THE PATTERN OF NIAGARA'S FALLS

The famous Horseshoe Falls (foreground) is changing its curves. In the past 50 years it has worked its way 300 feet upriver. The once-straight line of the American Falls has acquired a curve.

Bulletin No. 5, April 24, 1950.

Guaymi Indians of Panama Enjoy April Fiesta

EVERY April the primitive and seldom-seen Guaymi Indians of Chiriqui Province, western Panama, gather for their big annual fiesta, a ceremony known as a *balsería*.

The balsería, attracting 3,000 or more of Panama's mountain tribesmen, has the obvious social function of providing a good time. It has religious meaning, too, concerned primarily with bringing about good crops. The Guaymi Indians are farmers as well as hunters and fishermen.

Few Outsiders Have Witnessed It

The most striking phase of the balsería, however, is its endurance contest between opposing groups. It is a sort of mayhem marathon, according to Matthew W. Stirling, Chief of the Bureau of American Ethnology of the Smithsonian Institution, Washington, D. C. Dr. Stirling, one of the few outsiders ever to witness the affair, describes the strenuous festival in a report on the latest National Geographic Society-Smithsonian Institution Archeological Expedition to Panama (illustration, next page).

From the little mountain village of Tolé, just north of the Pan American Highway in western Panama, Dr. Stirling and his party traveled horseback over rough trails to the isolated site of the annual event.

All the Guaymi men, women, and children were elaborately painted (illustration, cover) and costumed, Dr. Stirling noted. Most of the men wore headdresses of macaw feathers of the brilliant metallic green tail feathers of the quetzal.

In these ceremonies the Indians living near the chosen site act as hosts and constitute one group. The visiting Indians from over the mountain are the guests and constitute the opposing group. They team off into smaller units which oppose each other in contests of various sorts.

The principal contest is one in which a log of balsa wood six feet long and four inches in diameter is alternately thrown from close range by the contestants of one team at the shins of their opponents. "Etiquette requires that when one is struck, no indication of pain be given," Dr. Stirling said. Though balsa is among the lightest of woods, logs of the size used have considerable body. The Indians throw the poles end first, increasing the force of blows.

Forty-eight-hour Contest

Fist-fighting is another approved form of vigorous competition. Challenges are given and accepted as individuals of the opposing groups pair off. The contestants fight viciously with bare fists until one is completely incapacitated.

Fists and balsa poles are thus thrown uninterruptedly, although in relays, for a period of 48 hours, day and night. No less continuous is the din maintained by thousands of Indians singing, shouting, and blowing on conch-shell horns, bamboo flutes, and wax whistles. Chicha, the native drink, keeps throats moistened.

The endurance and capacity for punishment displayed by the Indians

Whales, vital food source for many Europeans, long have been reduced to scarcity in Northern Hemisphere waters. Blue whales, biggest of all, currently show signs of sharp depletion in Antarctic whaling grounds. A new international treaty shortens the hunting season as a whale conservation measure.

Outsize creatures prevail, too, on a list of vanishing species recently called to international attention by the National Wildlife Federation. They include the orang-outang of Borneo and Sumatra, the great one-horned rhinoceros of India, the Asiatic lion, the Arabian ostrich, the California condor, and the bush elephant.

NOTE: For additional information on wildlife, see "Roaming Africa's Unfenced Zoos," in the *National Geographic Magazine* for March, 1950; "Wildlife of Everglades National Park," January, 1949; "Haunting Heart of the Everglades," February, 1948; "Men, Moose, and Mink of Northwest Angle," August, 1947; "High Country of Colorado," July, 1946; "Wildlife of Tabasco and Veracruz," February, 1945*; "King of Cats and His Court," February, 1943; "Wings Over Nature's Zoo in Africa," October, 1939; "Lords of the Rockies," July, 1939; and "Around the World for Animals," June, 1938.

WENDELL AND LUCIE CHAPMAN

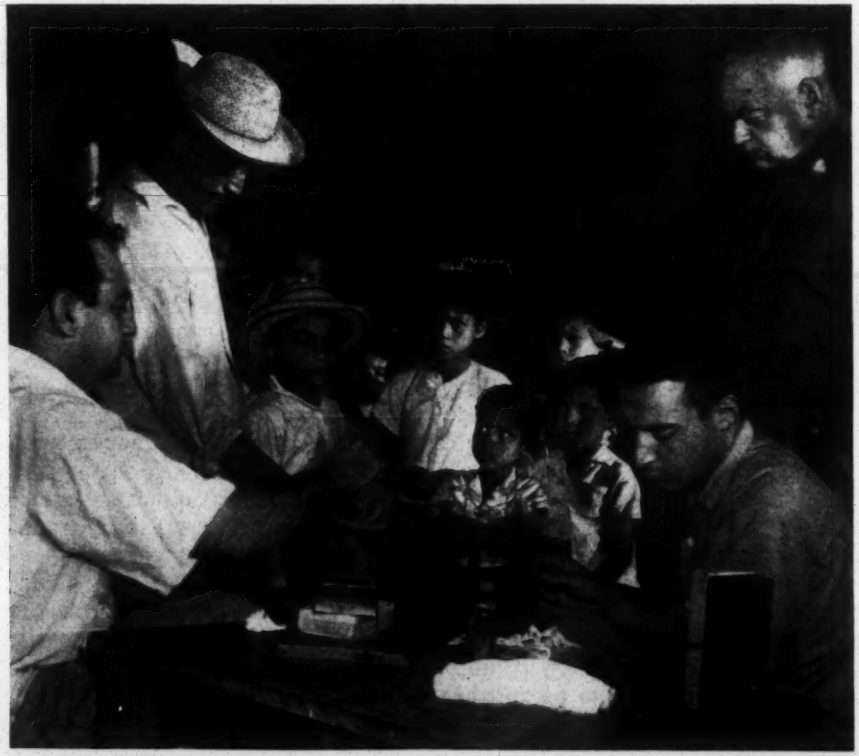
DEEP IN THE ROCKIES, A BULL WAPITI ELK BELLOWS FOR HIS FAMILY

One male lords it over a group of several cows and calves. Every fall he locks horns with other bulls for continued leadership. The original European elk is similar to the American moose, while the American elk resembles the European stag. Early settlers mistakenly started calling the deerlike animal an elk. More recently, scientists have taken to using the Indian word "wapiti" as the correct name of American elk. Largest herds of surviving wapiti roam in the Yellowstone National Park area and on the Olympic Peninsula of Washington.

in these affairs seem almost incredible to a person from a civilized community, Dr. Stirling observed. The entire balsería is looked forward to by the Indians with great pleasure, however, for they regard it as the best time they have during the year.

NOTE: Panama is shown on the Society's map of Countries of the Caribbean, on which the Canal Zone appears in a large-scale inset.

For additional information, see "Exploring Ancient Panama by Helicopter," in the *National Geographic Magazine* for February, 1950; "Exploring the Past in Panama," March, 1949; "Panama, Bridge of the World," November, 1941*; and, in the GEOGRAPHIC SCHOOL BULLETINS, April 11, 1949, "Helicopters and Archeology Mix in Panama."



RICHARD H. STEWART

AT UTIVÉ A YELLOW FEVER OUTBREAK INTERRUPTS A NATIONAL GEOGRAPHIC EXPEDITION

Arriving in this Panama village at the edge of the jungle, Dr. Matthew W. Stirling and his party were surprised to find several cases of the dread disease that had slowed up the building of the Panama Canal many years before, but had since become rare. Here Panama government and Canal Zone officials inoculate villagers to keep the fever from spreading.

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